# <u>C-A SCHEDULED SHUTDOWN –WEDNESDAY JAN. 7, 2004, 0700-1500HRS</u> <u>REV. 1</u>

R. Zaharatos – Tuesday January 6, 2004

## Restricted Access – HEBT, AGS, and RHIC

#### **Controlled Access – ATR and Booster**

#### PRIMARY SCHEDULE

#### Wednesday 01/07/04

0700: Dump any stored beam and open (Restricted Access) all of RHIC areas EXCEPT the dump regions.

0730: Access dump regions for HP survey. Put to RA after surveys completed.

0800: HEBT to AGS HEBT Gate on Restricted Access(requires HP survey)

0900: AGS Ring on Restricted Access(requires HP cursory and job specific surveys)

0900-1100: Booster Controlled Access

1500: Begin sweeps – 1.) HEBT 2.)AGS 3.)RHIC

JOBS STATUS CODE: C complete IP in-process RS reschedule CAN cancelled \* additions

#### **RHIC JOBS**

#### Collider P.S – R. Zapasek

#### **IR Supplies in Service Buildings**

- 1) Replace yi2-qf9 fiber optic card with original because Al sees errors, give yi2-qf9 f.o. card I pull out to Ralph to check out. (Don)
- 2) Replace yi10-qf9-ps aux contacts. Check with Don and make sure CAS has not done it already. Lock out yellow main quad power modules because it is a 200A p.s. (Mitch and Joe). Do this before #3.
- 3) Investigate multi-conductor signal cable connections from QPA to p.s. and from QPA to QPAIC. Remove D connectors and covers and see if any pins are loose or any wires coming off. We had an unexplained trip and the timing resolver picked out this p.s. or QPA. There were no faults. It happened on 12/29/03 when we were trying to recover the links after the last maintenance day. (Mitch and Joe).
- 4) Replace bol1-qf8-ps aux contacts. Check with Don and make sure CAS has not done it already. Lock out blue main quad power modules because it is a 200A p.s. (Jeff and Tom). Do this before #5.
- 5) Pull out bi5-qd2 and bo6-tq4 current regulator cards for Jim to examine relays. Have Jim try to fix them and re-install them if he thinks it is a quick fix so we don't have to put spares in. If Jim says the fix will take too long put spares in. (Jeff and Tom)

- 6) Load new Timing Resolver Software to 4B-A3, more precise timing on recording main power supply downtime. (**Gregg**)
- 7) Add soft ground to 1002B Permit Bypass Chassis (Node card is completely floating) and replace the Atmel PAL with AMD PAL. Will bring down both rings and require 10 minutes to replace the PAL. (Wing)
- 8) Check bo3-qd7-qp fan switches that CAS replaced (Gregg)

## Main p.s.'s in service buildings

- 1) Carl needs 3 hours of dedicated test time to work on Reg error of blue main quad.
- 2) Instrument yellow dipole OCC PFN circuit with Astromed. (Carl, Roger, Fred, others)

# ATR p.s.'s in service buildings

1) Try to put remote I/O alarm bit in for one PLC and try to test one PLC with Joe P to see if it works.

#### **Temperature Monitor System in RHIC tunnel**

- 1) People will walk the whole ring to inspect the temperature monitoring system as well as insulation. I am not sure about this one.
- 2) Replace failed temperature sensor at Y6-17TA and update new database. (Rich C)

#### IR p.s.'s in service buildings

- 1) <u>Check voltage lemo of yo9-dh0</u> and y12-dh0 and compare with buffer card reading. Voltage looks low on pet page.
- 2) AC Power line monitor problems at 12A and 8b. See PMViewer

# <u>Vacuum Group – S. Gill</u>

- 1. Check ion pump cable in zone 1z2 about 100' from the section gate with the BRAHMS IR, on the inside aisle...cable melted?
- 2. Remove ppa's: g7-ppa-pi2, bo2-ppa-pi6 (no reply, removed?), yo5-ppa-pi6 (no reply removed?), yi7-ppa-pi6 (no reply removed?), bo11-ppa-pi6 (no reply removed?)
- 3. Check problem with g2-svx (no open limit indication) sect. 2
- 4. Wrap sect. 4 stoichastic cooling kicker in preparation of bakeout (tapes, variacs, to wires, foil, nomex)
- 5. Zero out tcg's (list to follow)
- 6. Sect. 5, 6, 7, & 8 Remove any foil / insulation / etc. from beam pipe for BLM installation

## RF Group - N. Laloudakis

1. Landau Cavity completion and interlocks recheck.(requires sect. 4 being secured for approx. 1hr.)

# Beam Components and Instrumentation - D. Lehn

# Stoicastic Cooling Sect. 4 & 11

- 1. Pick-up tank in sect. 11
  - a) Repair right plate motion
  - b) Calibrate linear pots
  - c) Test through BPL
- 2. Kicker Tank -Sector 4
  - a) Repair right plate motion
  - b) Calibrate linear pots
  - c) Repair H U/S read-back
  - d) Calibrate Thermoucouples
  - e) Test through BPL

#### Collimators sect. 7 & 8

1. Fine tune motion control

# Pin Diodes

1. Move electron Detector Pin Diode cables from 12 IR to 12 Warm Bore by new dipole

#### Hodoscopes

1. Make list of cable work needed due to JET Polarimeter Installation

#### **BLM**

- 1. Move Y4-LM3 to new location
- 2. Install cables/bottles and test 4 new locations
  - a) D/S Yellow Triplet at 7 o'clk
  - b) D/S BlueTriplet at 8 o'clk
  - a) D/S Yellow Triplet at 5 o'clk
  - a) D/S Blue Triplet at 6 o'clk

#### Gap Cleaning

- 1. Check Chiller Reservoirs
- 2. Run test for HV Pulser
- 3. Possible modification of HV Pulser

#### **CRYO(Warkentien/Masi)**

1. Fine tune thermistor flows through-out the ring in order to minimize the formation of ice balls(will require several maint. days) This period sects. 9 through 1.

#### **High Frequency Instrumentation – B. Sikora**

- 1. Sect. 1 & 2 moveable BPM Schottky Cavity and Two Meter Kickers access for fine tuning required after beam start-up.
- 2. QMM(Quad Monitor) will also require access for tuning
- 3. Replace 1394 cables in 1A Alcove
- 4. Swap two BPM modules in the same area
- 5. Recheck cables, TDR in 1 and 2

# Access Controls(Meany)

1. Landau Cavity - correct power feed phase. Requires recertification.

#### **Tunnel Maintenance**

1. Water intrusion in Sect. 12 IR above Jet Target location

#### RHIC/FES Division - A. Pendzick

<u>STAR</u> – Access for experimenter. Back-flush heat exchanger(WS Grp.)

<u>PHENIX</u> - Experimenter access

<u>BRAHMS</u> – Time of flight survey

8D8 Magnet in Sect. 10 – complete P.S. installation and turn on water to magnet..

Sectors 8 & 9 – Safety related work requests(Carpenters)

#### AGS(external)

- 1. E10 Hse. UPS Move alternate feed to same substation as normal feed.(Nehring)
- 2. Cyberex UPS modification/repairs(Magoulis -3hrs). Switchover to external bypass expected to be transparent Feeds all the AGS ring gates, AGS crash, PASS system A & B, PASS BAF, SIEMENS equip iterlocks, SEB and AGS chipmunks, prime and redundant SEB and FEB sec, U,V,W,X,Y PLC power.
- 3. Siemen's Cycloconverter UPS By-pass testing of inverter.(Magoulis)
- 4. Replace power supply in vertical sextupole Eurocard controller chassis in Multipole room.(Controls Grp.)

#### **AGS RING**

- 1. E20 Snake continue installation of water piping(PE).

  Perform survey to position mounting jacks
  Continue cabling installation.
- 2. Safety Related Work Requests List for electricians.
- 3. E15 Inspect lamp test set-up(Bm. Comp.)
- 4. AC Dipole retrieve test transformer @ A10

#### <u>ATR</u>

1. Check temperatures of up stream magnets(Phillips)

#### SEB EXTERNAL

#### **Access Controls**

1. Replace 4 redundant relays on 28 Board.

# **BOOSTER EXTERNAL**

# **Vacuum**

1. Zero out tcg's (list to follow)

# BPM's/ Controls Grp.

- 1. Rematch B1 cables
- 2. Match E6 cables
- 3. Investigate A3(open) and C3(shorted)
- 4. Install air filter assemblies.
- 5. Repair exhaust fan on C Sect. Rack

# **BOOSTER RING**

#### Vacuum

- 1. Replace solenoid on D-3 sector valve (hissing)
- 2. Add oil to air line oilers
- 3. BPM repairs/reconfigure(DiFranco)

# **LINAC/HEBT ACCESS**

# **Access Controls**

1. Annual recertification.

# **PE Fire Alarms Electricians**

1. Repair HEBT zone and put back on line.

# **NSRL EXTERNAL**

# **Vacuum**

1. Zero out tcg's (list to follow)